



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,253	09/30/2002	Scott G. Hicks	U02-0022.20	5656

24239 7590 07/18/2005

MOORE & VAN ALLEN PLLC  
P.O. BOX 13706  
Research Triangle Park, NC 27709

EXAMINER

CAI, WAYNE HUU

ART UNIT	PAPER NUMBER
----------	--------------

2681

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/065,253

Applicant(s)

HICKS ET AL.

Examiner

Wayne Cai

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06/15/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 06/15/2005 have been fully considered but they are not persuasive.

The Applicants assert that the present invention utilizes the Enhanced Operator Name String (E-ONS) functionality included in mobile phones **not** SID identifiers, and PLMN is not the same as a SID. The Examiner respectfully disagrees and requests the Applicants to refer to paragraph 0040 of McElwain regarding the various ways of using the terms System Identification Code (SID) and Public Land mobile Network (PLMN) in different communications systems. It is apparent that these two terms are equivalent.

The Applicants assert that the Examiner combines Linkola with McElwain for the purpose of expressly providing for a SIM card in an attempt to read on each element/step in claim 1 of the present invention, and the Examiner inappropriately assume that Linkola specifically includes either a PNN file or an OPL file on a SIM card without an explicit reference to the same. The Examiner again respectfully disagrees with the assertion because of two reasons. Firstly, the Examiner combines Linkola with McElwain for the purpose of expressly including and/or utilizing a SIM card in the mobile phone regardless of the files being installed/contained in the SIM card. One skilled in the art would have known that the OPL and PNN files are contained in the SIM card based on the disclosure of McElwain because there must be a storage containing the related data so that the system could make the comparison, and determine whether the

Art Unit: 2681

mobile phone is in home or roam network. Secondly, McElwain also discloses the OPL and PNN files. The Operator PLMN List (OPL) file in the present invention is the set of PLMN ranges (i.e., more than one SID is incorporated into the mobile station (see paragraph 0057)), and the PLMN Network Name (PNN) file which is an expansion of the positive/negative SID list (see paragraph 0006).

Hence, previous rejection was proper and the rejection below serves as information purpose only.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **1-4, 7-10, 13-16, and 19-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over McElwain et al (hereinafter McElwain) (US 2003/0033689 A1) in view of Linkola et al (hereinafter Linkola) (US – 6,708,033 B1).

Regarding claims 1, 7, 13, and 19, McElwain discloses a method, system, computer program for determining whether a mobile phone is currently in a home network or a roaming network, comprising:

- a processor coupled with said SIM card (fig.2, 170 and 15) ,

Art Unit: 2681

- receiving, in the mobile phone, an over-the-air signal comprised of control data including public land mobile network (PLMN) data and location area information (LAI) data (fig.4A, step A);
- comparing the received PLMN data to PLMN data stored (paragraph 0045, step B), and if the received PLMN data matches the stored PLMN data, then determining that the current network is a home network (paragraph 0046, and step C); otherwise checking whether the received LAI data is contained in the OPL file (step D), and if not, then determining that the current network is a roaming network (step E); otherwise checking if the PNN record that the OPL record points to is the first record of the PNN file (paragraph 0057, and step D), and if it is, then determining that the current network is a home network (step C); otherwise determining that the current network is a roaming network (step E).

McElwain, however, fails to disclose the mobile phone including a SIM card resident thereon, the SIM card including an IMSI file, an OPL file, and a PNN file, each file having a record structure.

In a similar endeavor, Linkola discloses a system changing the service profile of a mobile subscriber. Linkola also discloses the mobile phone including a SIM card resident thereon, the SIM card including an IMSI file, an OPL file, and a PNN file, each file having a record structure (fig.2A-C, and its descriptions).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McElwain's method of determining the home network and include a SIM card on the mobile phone having IMSI, OPL, and PNN files, each having a record structure to determine whether the mobile phone is in a home or roam network.

Regarding claims 2, 8, 14, and 20, McElwain and Linkola disclose all limitations of claims 1, 7, 13, and 19 as described above. Linkola also discloses the networks are GSM networks (column 1, lines 16-38).

Regarding claims 3-4, 9-10, 15-16, and 21-22, McElwain and Linkola disclose all limitations of claims 2, 8, 14, and 20 as described above. Neither McElwain nor Linkola discloses wherein upon WAP session request, a digital CSD connection if the network is a home network, or analog CSD connection if the network is a roaming network. However, it is well known in the art that upon a WAP session request, a digital CSD connection if the network is a home network, and an analog CSD connection if the network is a roaming network because when roaming into another network carrier, the signal of the mobile phone is on different band compare to the home network; therefore, only analog signal is provided.

4. Claims **5-6, 11-12, 17-18, and 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over McElwain in view of Linkola, and in further view of Raith (US – 6,493,547 B1).

Regarding claims 5, 11, 17, and 23, McElwain and Linkola teach all the limitations of claims 2, 8, 14, and 20 as described above. However, McElwain and

Linkola do not teach wherein the mobile phone provides an audible signal when the mobile phone is in a roaming network.

In a similar endeavor, Raith discloses an apparatus and method for providing usage information in wireless communication systems. Raith also discloses wherein the mobile phone is providing an audible signal when the mobile phone is in a roaming network to indicate that roaming charges apply while the mobile phone is in the roaming network (column 11, lines 55-67, and column 12, lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McElwain and Linkola's invention with Raith's method and apparatus of providing visual or audible signal to indicate that the mobile phone is in a roaming network because it is just helpful for users to realize that they are in the roaming area where it might cost them more for using the phone in this area.

Regarding claims 6, 12, 18, and 24, McElwain and Linkola teach all the limitations of claims 2, 8, 14, and 20 as described above. McElwain and Linkola, however, fail to disclose mobile phone further comprising providing a visual signal when the mobile phone is in a roaming network to indicate that roaming charges apply while the mobile phone is in the roaming network.

Raith discloses the mobile phone further comprising providing a visual signal when the mobile phone is in a roaming network to indicate that roaming charges apply while the mobile phone is in the roaming network (column 11, lines 55-67, and column 12, lines 1-7).

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

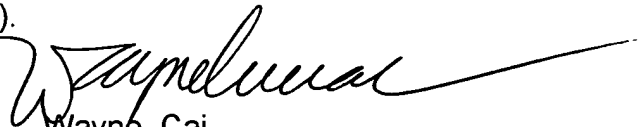
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Cai whose telephone number is (571) 272-7798. The examiner can normally be reached on Monday-Friday; 9:00-6:00; alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wayne Cai  
Examiner  
Art Unit 2681

  
**ERIKA A. GARY**  
**PRIMARY EXAMINER**